

- #1 What value is returned by **SwitchFun(5)**?
- (a) 0.
 - (b) 10.
 - (c) 160.
 - (d) 384.
 - (e) None of the above.
- #2 Which of the following would be returned by **SwitchFun(1000)**?
- (a) 128
 - (b) 1000
 - (c) 32768
 - (d) 64000
 - (e) None of the above.
- #3 As given, what will be returned by **ShiftFun(1000)**?
- (a) 128
 - (b) 1000
 - (c) 32768
 - (d) 64000
 - (e) None of the above.
- #4 What order of evaluation, first to last, must be followed by the **ShiftFun()** return expression in order to be equivalent to **SwitchFun()**?
- (a) `<<, ?:, >`.
 - (b) `<<, >, ?:`.
 - (c) `>, ?:, <<`.
 - (d) `?:, >, <<`.
 - (e) None of the above.
- #5 Which of the following single-paren return expressions will make **ShiftFun()** equivalent to **SwitchFun()**?
- (a) `return (i<<6)>i?i:6;`
 - (b) `return (i<<6>i)?i:6;`
 - (c) `return i<<(6>i)?i:6;`
 - (d) `return i<<(6>i?i:6);`
 - (e) `return i<<6>(i?i:6);`

```
#include <stdio.h>

int switchFun(int i)
{
    switch (i)
    {
        default: i += i;
        case 5: i += i;
        case 4: i += i;
        case 3: i += i;
        case 2: i += i;
        case 1: i += i;
        case 0: i = i;
    }
    return i;
}

// Order of precedence (highest to lowest): {<<, >, ?:.}
// Recall that (a<<b) is 'a' left shifted 'b' bits.

int shiftFun(int i)
{
    return i << 6 > i ? i : 6;
}

int main(void)
{
    int i;

    for (i = 0; i < 10; i++)
        printf("%i => %i (%i)\n", i, switchFun(i), shiftFun(i));

    system("pause");
    return 0;
}
```